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APPLICATION NO. 08/961,084	FILING DATE 10/30/97	FIRST NAMED INVENTOR KRONGAUZ	ATTORNEY DOCKET NO. 240606
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CUSHMAN DARBY & CUSHMAN  
1100 NEW YORK AVENUE N W  
NINTH FLOOR EAST TOWER  
WASHINGTON DC 20005-3918

IM22/1121

EXAMINER BERMAN, S
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ART UNIT 1711	PAPER NUMBER 20
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DATE MAILED: 11/21/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**08/961,084**

Applicant(s)

**Krongauz et al.**

Examiner

**Susan Berman**

Group Art Unit

**1711**



☒ Responsive to communication(s) filed on Nov 2, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 19, 27, and 29-49 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 19, 27, and 29-49 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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***Response to Amendment***

Claim 27 has been amended to recite one or more polyfunctional diluents as component (b) and one or more monofunctional diluents as component (e).

***Response to Arguments***

Applicant's argument that EP '041 fails to teach compositions comprising one or more monofunctional diluents, one or more polyfunctional diluents and an acrylate-functional urethane oligomer having a hydrocarbon backbone is unpersuasive. EP '041 clearly discloses examples comprising mixture of monofunctional and polyfunctional (meth)acrylate diluents and an acrylate-functional urethane oligomer. EP '041 clearly teaches that while polyether oligomers are extensively discussed, other coating compositions containing oligomers based on polyolefins, polycarbonates, polyesters and combinations thereof may be modified as taught. The instant claims are drawn to compositions which are taught within the disclosure of EP '041, as set forth below. Applicant has not provided any evidence of unexpected results commensurate in scope with the instant claims to rebut the prima facie obviousness of providing compositions comprising components clearly taught by EP '041.

***Claim Rejections - 35 USC § 112***

Claims 29 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is intended by the phrase "phosphoric acid based adhesion promoter". In what way is the adhesion "phosphoric acid based"? Is the adhesion promoter a

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mixture of phosphoric acid with other ingredients? Is the adhesion promoter a derivative of phosphoric acid and, if so, what kind of derivative? Applicant discloses acrylate esters of phosphoric acid on pages 16-17 of the specification.

***Claim Rejections - 35 USC § 102 and/or 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 19, 27 and 29-49 are rejected under 35 U.S.C. § 103(a) as obvious over EP 0 801 041. EP '041 discloses compositions comprising an acid functional ethylenically unsaturated monomer that is preferably an ethylenically unsaturated phosphoric acid. See the compositions set forth on page 7, lines 35-50, and in Examples 2, 4 and Table 2. These examples comprise mixtures of polyfunctional (meth)acrylate monomers and monofunctional (meth)acrylate monomers. Such mixtures are also disclosed in each of Patents 4,682,851, 4,472,019, and 4,932,750, which patents are incorporated by reference into EP 0 801 041. EP '041 teaches that any conventional coating composition can be modified as taught and that such coating compositions include oligomers based on polyolefins, such as saturated or unsaturated polybutadienes (page 6, lines 36-39).

It would have been obvious to one skilled in the art to include with or substitute an oligomer based on a polyolefin, such as saturated or unsaturated polybutadiene, for the polyether urethane acrylate in the compositions disclosed by EP '041. The reason is that EP '041 teaches

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that other coating compositions, such as those comprising oligomers based on polyolefins, can be modified by incorporating an ethylenically unsaturated phosphoric acid compound.

It would have been obvious to one skilled in the art to employ a mixture of polyfunctional (meth)acrylate reactive diluents and monofunctional (meth)acrylate reactive diluents in the compositions disclosed by EP '041. EP '041 provides motivation by using mixtures of reactive diluents in the Examples. Furthermore, the references incorporated by reference for disclosing compositions to be used in the disclosed invention teach compositions comprising mixtures of reactive diluents.

With respect to claims 30-32, the properties of the cured coating prepared by radiation curing the claimed composition are considered to be a statement of future intended properties and not of any patentable weight in the absence of a showing of unexpected results. See Table 3 for dielectric dissipation factor. See Table 2 for flexibility tests.

With respect to claim 34, aliphatic polyisocyanates are taught in page 5.

Claims 19, 27 and 29-49 are rejected under 35 U.S.C. § 103(a) as obvious over Shustack (5,352,712) in view of EP '041.

Shustack discloses coating compositions comprising a hydrocarbon polyol based reactively terminated aliphatic urethane oligomer. See column 9, lines 1-53. Organofunctional silanes are taught as adhesion promoters in columns 14-15. The disclosure of EP '041 is discussed above.

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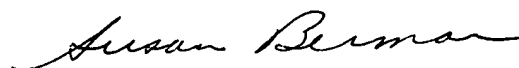
It would have been obvious to one skilled in the art to include an adhesion promoter in the compositions taught by Shustack because Shustack teaches that an adhesion promoter is optional and is required under conditions of high humidity and higher temperature. It would have been obvious to one skilled in the art to employ a strong acid functional ethylenically unsaturated monomer, such as phosphoric acid monoacrylate, as an adhesion promoter in the compositions disclosed by Shustack, as taught by EP '041 in analogous compositions in analogous art. With respect to claims 30-32, the properties of the cured coating prepared by radiation curing the instantly claimed composition set forth are considered to be a statement of future intended properties and not of any patentable weight in the absence of a showing of unexpected results. It would have been obvious to one skilled in the art to determine the optimum weight percents of components disclosed by Shustack to provide the desired properties in the coatings prepared by curing instantly claimed compositions.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Berman whose telephone number is (703) 308-0040.

The fax number for this group is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



Susan Berman  
Primary Examiner  
Art Unit 1711

SB  
November 20, 2000